



PATENT APPLICATION  
Serial No. 09/960,562  
ATTY. DOCKET NO. 2103-010926

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Art Unit No. 3754

In re application of

**ROBERT J. SMITH**

Serial No. 09/960,562

Filed September 21, 2001

Examiner – Joseph A. Kaufman

**CONTAINER CLOSURE WITH  
HORIZONTAL AND VERTICAL  
SEALS**

Pittsburgh, Pennsylvania  
November 25, 2002

**REQUEST FOR RECONSIDERATION**

Commissioner for Patents  
Washington, D.C. 20231

Sir:

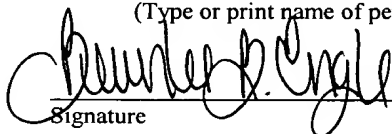
The Office Action of July 25, 2002 has been reviewed and the Examiners comments carefully considered. A Petition for One-Month Extension of Time accompanies this response.

In paragraph 1 of the Office Action the Examiner has requested proposed drawing corrections to address the cited informalities. Attached hereto are proposed drawing corrections, with the proposed corrections shown in red ink, addressing all of the informalities cited by the Examiner. Specifically reference numerals 14 and 112 are being correctly illustrated in the modified drawings.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Commissioner for Patents, Washington, D.C. 20231 on November 25, 2002.

Beverlee R. Brenneman

(Type or print name of person mailing paper)

  
Signature

11/25/2002  
Date

*#6 Reconsideration  
12/1/02  
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DEC 09 2002  
TECHNOLOGY CENTER R3700

No new matter is being added. Approval of the proposed drawing corrections is respectfully requested. Formal drawings will be prepared following the Examiners approval of the attached proposed drawing changes.

The Examiner has rejected the subject matter of claims 1-3, 5-7, 9 and 10 as being clearly anticipated by the teachings of U.S. Patent No. 5,655,568 to Carr et al. (hereinafter "the Carr Patent"). The Examiner suggests that the Carr Patent discloses "closure 12; container 100; opening at 106, tip 14; opening 44; horizontal seal 42; vertical seal 46; second horizontal seal 58; second vertical seal 40; dome 16; opening 32; and tamper band 52". The Applicants respectfully traverse this rejection for the following reasons.

As set forth in the field of the invention, the present invention is directed toward "to a container closure having both vertical and horizontal seals in the flow path". The definition of these terms is critical.

As explained in the disclosure, a vertical seal, within the meaning of this invention "is a seal in which the container closure is directly forcing the seal against a sealing surface. The typical example of a vertical seal is a liner in a threaded flat cap that is forced against the container opening as the cap is threaded to the closed position. The term "vertical seal" is used because in a standing container (e.g., a bottle) the sealing forces of these seals are often aligned or arranged vertically; however, the seals may certainly be in any orientation". See paragraph 5 of the disclosure.

As explained in the disclosure, a horizontal seal, within the meaning of this invention "is a seal in which the container closure, or movement of the container closure, is not directly forcing the seal against a sealing surface. The movement of the container closure between the open and closed position will typically move the horizontal seal from a position engaging a sealing surface to an open position not engaging the sealing surface, but this motion is not along the sealing axis. Push-pull type closures typically use one or more

horizontal seals between the tip and a stem extending from the shell. Horizontal seals typically can slide along the sealing member maintaining the seal throughout at least a portion of the tip movement, until the seal is moved past the sealing member (or to a gap in the sealing member). The term "horizontal seal" is used because in a standing container (e.g., a soap container) the seals and the sealing forces of these seals are often aligned or arranged horizontally; however, the seals may certainly be in any orientation". See paragraph 6 of the disclosure.

As further defined in the specification all "closures define a flow path from the container opening for dispensing the contents of the container when the closure is in the open position. Seals in the closure that open and close this flow path are considered, within the meaning of this application, to be within the flow path".

Independent claim 1 of the application defines container closure for a container including a tip moveable between an open and a closed position, wherein the tip includes at least one horizontal seal in the flow path for sealing the closure when the tip is in the closed position and at least one vertical seal in the flow path for sealing the closure when the tip is in the closed position. The flow path for contents of the container is defined between the container opening and the tip opening when the tip is in the open position.

Contrary to the Examiner's assertion, the Carr Patent does not provide both a vertical and a horizontal seal in the flow path. The annular ring 46 is sized to provide frictional engagement with the channel 28. This is a horizontal seal, as defined in the present application. The flow path of the Carr Patent includes two horizontal seals (ring 46 and opening 44 on plug 26. This is the arrangement discussed in the background of the invention. There is no teaching or suggestion of a first and second horizontal seal IN THE FLOW PATH as defined in claim 1. Attached hereto is a marked up enlarged copy of the drawings of the Carr Patent to better show the seals in the flow path.

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The Examiner has rejected the subject matter of claim 4 as being obvious in view of the Carr Patent. Claim 4 depends from claim 1 and is believed to be allowable for the reasons discussed above in connection with claim 1.

The Examiner has rejected the subject matter of claims 8 and 11-20 as being obvious in view of the Carr Patent taken in view of the teachings of Iseli. The Examiner suggests that it would be obvious to attach the tip of Carr Patent directly to the container as taught by Iseli. This rejection is respectfully traversed for the following reasons.

Assuming the modifications of the Carr Patent suggested by the Examiner were obvious, the suggested modification would not lead to the present claimed invention. As noted in the specification, it "is an object of the present invention to provide a container closure with a tip in which the tip opening does not act to remove the closure from the container". This is accomplished by providing container closure having a dome attached to the container and covering the container opening, and a tip moveable between an open and a closed position, wherein the motion of the tip from the closed to the open position is stopped directly by the container, and wherein the movement of the tip from the closed to the open position substantially does not act to remove the dome from the container.

The Carr Patent teaches a structure in which the opening of the tip tends to pull the closure (and dome 16) off of the container. This is the prior art that the present invention is attempting to improve upon. The Iseli patent places the tip directly on the container, which requires a relatively complex container neck finish and a relatively expensive container manufacturing process. Regardless, placing the neck on the container as suggested by the examiner does not teach or suggest the tip, dome and container combination as set forth in claim 11. The present claimed arrangement allows the dome to be easily attached, such as a snap fitting or the like, to the container since the dome does not resist the forces associated with the tip opening. As defined in claim 11 the motion of the tip from the

closed to the open position is stopped directly by the container, such that the movement of the tip from the closed to the open position substantially does not act to remove the dome from the container.

Claim 13 depends from claim 11 and further defines that the dome includes a concave portion in which the at least one dome opening is formed, wherein the dome provides self-draining to return contents to the container. This structure further distinguishes the present invention from the applied prior art, taken alone in combination.

Claim 15 depends from claim 11 and defines, in part, that the tip further includes at least one horizontal seal in the flow path for sealing against the dome when the tip is in the closed position and at least one vertical seal in the flow path for sealing against the dome when the tip is in the closed position. This structure is not found in the cited prior art as discussed above in connection with the rejection of claim 1. The Iseli patent utilizes horizontal seals in the flow path as shown in the drawings of the Iseli Patent.

Claim 16 further defines that the forces from the vertical seals between the tip and the dome are transferred directly to the container through the dome. This structural relationship is not taught or suggested in the applied prior art.

Independent claim 18 defines a "container closure for a container having an opening, the closure comprising:

- a dome attached to the container and covering the container opening, the dome having at least one dome opening in fluid communication with the container opening; and

- a tip moveable between an open and a closed position and having an opening adapted to be in fluid communication with the container opening through the at least one dome opening, wherein a flow path for contents of the container is defined between the container opening and the tip opening when the tip is in the open position, wherein the tip in the closed position closes the container, wherein the tip is attached directly to the container,

and further including no more than one tamper evident band on the closure to indicate initial opening of the closure, wherein the single tamper evident band is attached to the tip." The applied prior art does not teach or suggest the tip, dome and container combination as discussed above. Further, there is no teaching of "no more than one tamper evident band on the closure to indicate initial opening of the closure, wherein the single tamper evident band is attached to the tip". The Carr Patent provides for a plurality of tamper evident bands.

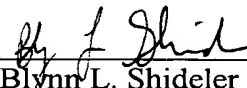
Claim 19 further defines that the motion of the tip from the closed to the open position is stopped directly by the container, wherein the movement of the tip from the closed to the open position substantially does not act to remove the dome from the container. Claim 19 is allowable for the reasons discussed above in connection with claim 11.

Finally independent claim 20 defines a container closure with a tip a dome and the container similar to claims 18 and 11 discussed above. Claim 20 further defines wherein the dome is held between the tip and the container during dislodging of the dome from the container. This further feature is a significant feature of the present invention that is not addressed in the applied prior art.

Claims 1-20 remain in the present application and favorable action is respectfully requested.

Respectfully submitted,

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